

REMARKS

In the Office Action, the Examiner rejected claims 1-23 under 35 USC §102 and 35 USC §103. In addition, the Examiner has objected to the specification and the drawings. These objections and rejections are fully traversed below. The claims have been amended to correct minor informalities and to further clarify the subject matter regarded as the invention. In addition, claims 17-18 and 22-23 have been cancelled. Claims 24-26 have been added, which include apparatus and computer-readable medium claims corresponding to claim 1. Claims 1-16 and 19-21 and 24-26 are now pending.

Reconsideration of the application is respectfully requested based on the following remarks.

OBJECTION TO THE DRAWINGS

The Examiner has objected to the drawings because they include the reference signs 402, 404, and 406 not mentioned in the description. The specification has been amended to include the reference signs 402, 404, and 406 shown in FIG. 4. Accordingly, Applicant respectfully requests that the Examiner withdraw the rejection to the drawings.

OBJECTION TO THE ABSTRACT

The Abstract has been amended to reduce the length of the Abstract to 150 words or less. Accordingly, Applicant respectfully requests that the Examiner withdraw this objection to the Abstract.

OBJECTION TO THE SPECIFICATION

The Examiner objected to the specification because the elements 1530 and 1532 referenced in the specification do not exist in FIG. 8. The specification has been amended to correct the typographical errors. Thus, elements 1530 and 1532 have been amended to correspond to elements 1502 and 1504 of FIG. 8. Accordingly, Applicant respectfully requests that the Examiner withdraw this objection to the specification.

REJECTION OF CLAIMS UNDER 35 USC §102

In the Office Action, the Examiner rejected claims 1, 3-7, 10-13 and 22 under 35 USC §102 as being anticipated by Mao et al, U.S. Patent No. 5,459,427, ('Mao' hereinafter). This rejection is fully traversed below.

Mao is directed to an apparatus and method for webcasting over a digital broadcast television network. See title. Specifically, Mao discloses a one-way broadcasting system that includes a headend system architecture adapted to receive data from the Internet and transmit the data through a digital TV network to receivers, a mapping function for mapping the Internet data to MPEG streams, a combining function for combining the Internet data

streams with digital video streams, a broadcast function for broadcasting Web content to users throughout the one way network; a linking function for linking the Internet data with digital video channels, and a navigation function for navigating broadcast data in the one way network. See abstract.

Claim 1, as amended, recites:

“A method of identifying a data stream in a digital television receiver, comprising:
obtaining a locator adapted for identifying a data stream;
associating the locator with one of a plurality of data streams, each one of the plurality of data streams being associated with one of a plurality of television channels; ~~and~~
mapping the locator to an IP address, thereby enabling a tuner to read the one of the plurality of data streams associated with the locator, wherein a first set of one or more IP addresses identifies one or more network interface cards and a second set of one or more IP addresses is associated with one or more locators such that the second set of one or more IP addresses identifies one or more of the plurality of data streams-;
reading one of the plurality of data streams identified by an IP address by a tuner upon determination that the IP address corresponds to a locator identifying a data stream; and
reading data from a network by a network interface card identified by an IP address upon determination that the IP address does not correspond to a locator identifying a data stream.”

The invention of claim 1 is directed to a method in which an IP address is mapped to a locator identifying a data stream associated with a television channel. Thus, a tuner reads a data stream identified by an IP address when the IP address corresponds to a data stream locator. A network interface card identified by an IP address reads data from a network when the IP address does not correspond to a data stream locator.

As set forth in the Summary of Applicant's specification, various embodiments of the invention enable data (e.g., multicast IP data transmitted in broadcast streams) to be selected and received. More particularly, a network interface card has an associated IP address. However, typically, a digital television receiver cannot identify a network interface card. Rather, a digital television receiver generally communicates solely with one or more

associated tuners. Thus, as set forth in claim 1, for example, through the association of an IP address with each data stream, a single system may be used to read and display data associated with a network card as well as a tuner.

Mao fails to disclose the invention of claim 1. Accordingly, Applicant respectfully submits that claim 1 is patentable over Mao.

Claim 10, as amended, recites:

“A method of selecting a data stream in a digital television receiver, comprising:
obtaining a data stream locator associated with a data stream;
providing the data stream locator to an interface map, the interface map being adapted for mapping one or more data stream locators to one or more IP addresses; and

receiving an IP address associated with the data stream locator from the interface map, wherein a first set of IP addresses including the IP address is associated with one or more data stream locators such that the first set of IP addresses identifies one or more data streams associated with one or more television channels and a second set of IP addresses identifies one or more network interface cards, thereby enabling one or more tuners to read the data streams associated with the first set of IP addresses and enabling the network interface cards identified by the IP addresses to read data from a network.”

As recited in claim 10, an interface map is used to map a data stream locator to an IP address. By providing a data stream locator to an interface map, the map returns an associated IP address. In addition, the digital television receiver supports two different sets of IP addresses, the first set identifying one or more data streams and the second set identifying one or more network interface cards. Mao fails to disclose such a system. Accordingly, Applicant respectfully submits that claim 10 is patentable over Mao.

Claim 11, as amended, recites:

“A method of selecting a data stream in a digital television receiver, comprising:
obtaining an IP address;
determining whether the IP address corresponds to a data stream locator associated with a data stream; and
when it is determined that the IP address corresponds to a data stream locator

associated with a data stream, ~~selecting~~ reading the data stream associated with the data stream locator by a tuner; and

when it is determined that the IP address does not correspond to a data stream locator associated with a data stream, reading data from a network by a network interface card identified by the IP address.”

Mao fails to disclose a method in which a digital television receiver can read data by a tuner as well as a network interface card. Specifically, Mao fails to disclose or suggest, determining whether an IP address corresponds to a data stream locator. Moreover, Mao fails to disclose or suggest reading a data stream associated with the data stream locator when the IP address corresponds to a data stream locator, and reading data from a network by a network interface card identified by the IP address when the IP address does not correspond to a data stream locator. Accordingly, Applicant respectfully submits that claim 11 is patentable over Mao.

The dependent claims depend from one of the independent claims and are therefore patentable for at least the same reasons. However, the dependent claims recite additional limitations that further distinguish them from the cited references. The additional limitations recited in the independent claims or the dependent claims are not further discussed as the above discussed limitations are clearly sufficient to distinguish the claimed invention from the cited references. Thus, it is respectfully requested that the Examiner withdraw the rejection of the claims under USC §102.

REJECTION OF CLAIMS UNDER 35 USC §103

In the Office Action, the Examiner rejected claims 2, 9, and 15-16 under 35 USC §103(a) as being unpatentable over Mao in view of well-known prior art. This rejection is fully traversed below.

Applicant respectfully submits that the claims, as amended, further clarify the subject matter regarded as the invention. While the generation and assignment of IP addresses is well known in the art, Applicant respectfully submits that the allocation and assignment of IP addresses in the manner claimed is neither disclosed nor suggested by the prior art. Thus, the

taking of Official Notice with respect to the allocation and assignment of IP addresses is respectfully traversed.

As set forth in the Summary of Applicant's specification, various embodiments of the invention enable data (e.g., multicast IP data transmitted in broadcast streams) to be selected and received. More particularly, a network interface card has an associated IP address. However, typically, a digital television receiver cannot identify a network interface card. Rather, a digital television receiver generally communicates solely with one or more associated tuners. Thus, through the association of an IP address with each data stream (e.g., claim 1), a single system may be used to read and display data associated with a network card as well as a tuner.

Mao fails to disclose or suggest the problem set forth in the Summary of Applicant's specification. Moreover, Mao neither discloses nor suggests a solution to this problem through the assignment of an IP address to each data stream. In fact, Mao appears to combine Internet data streams with digital video streams, thereby teaching away from using both a network interface card and a tuner in a digital television receiver in the manner claimed.

The Examiner further states that it would have been obvious to modify Mao with DHCP-based IP assignment in order to simplify the delegation and management of a large number of private IP addresses in a private IP network. While DHCP-based IP assignment may be used to simplify the delegation and management of a large number of private IP addresses in a private IP network, the combination of DHCP-based IP assignment with Mao would fail to achieve the desired result (e.g., to enable a single system to read and display data associated with a network card as well as a tuner). Moreover, although DHCP-based IP assignment may be used to delegate and manage a large number of IP addresses in a private network (e.g., for users accessing the network), the presently claimed invention does not use the assigned IP addresses for this conventional purpose (e.g., to be assigned to a user accessing the private IP network). Rather, the IP addresses are used to identify data streams or network interface cards, rather than users. Thus, the cited art teaches away from using private IP addresses in the manner claimed. Accordingly, Applicant respectfully submits that claims 2, 9, and 15-16 are patentable over the cited art.

In the Office Action, the Examiner rejected claims 8 and 14 under 35 USC §103(a) as being unpatentable over Mao in view of Thrift, U.S. Patent No. 6,510,557, ('Thrift' hereinafter). This rejection is fully traversed below.

While Thrift discloses the use of multiple tuners and decoders to provide picture-in-picture display, Thrift fails to cure the deficiencies of the primary reference. Accordingly, Applicant respectfully submits that claims 8 and 14 are allowable over the cited art.

In the Office Action, the Examiner rejected claims 17-21 and 23 under 35 USC §103(a) as being unpatentable over Mao in view of Perlman, U.S. Patent No. 6,580,722 ('Perlman' hereinafter). This rejection is fully traversed below.

Perlman discloses the use of a multicast group. However, Perlman fails to cure the deficiencies of the primary reference. In addition, claim 23 has been cancelled. Accordingly, Applicant respectfully submits that claims 17-21 are patentable over the cited art.

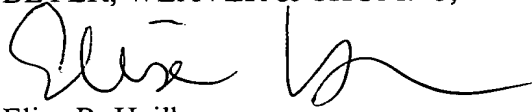
The dependent claims depend from one of the independent claims and are therefore patentable for at least the same reasons. However, the dependent claims recite additional limitations that further distinguish them from the cited references. The additional limitations recited in the independent claims or the dependent claims are not further discussed as the above discussed limitations are clearly sufficient to distinguish the claimed invention from the cited references. Thus, it is respectfully requested that the Examiner withdraw the rejection of the claims under 35 USC §103(a).

If there are any issues remaining which the Examiner believes could be resolved through either a Supplemental Response or an Examiner's Amendment, the Examiner is respectfully requested to contact the undersigned attorney at the telephone number listed below.

Applicants hereby petition for an extension of time which may be required to maintain the pendency of this case, and any required fee for such extension or any further fee required in connection with the filing of this Amendment is to be charged to Deposit Account No. 50-0388 (Order No. SUN1P505).

Respectfully submitted,

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A handwritten signature in black ink, appearing to read 'Elise R. Heilbrunn', written over a horizontal line.

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